

CRATE[®]

AMPLIFIER



OWNER'S MANUAL

Congratulations!

You are now the proud owner of the versatile and powerful Crate GX-140D amplifier with Digital Sound Processing and Stereo Chorus. With two flexible channels, Crate's patented "Flex Wave" distortion circuitry, 31 digital effects, a Stereo Effects Loop and three footswitchable functions, the GX-140D offers you more flexibility and performance than any amplifier in its class.

Like all Crate products, your GX-140D is Musician Made in the U.S.A., using only the best components. Extensive testing at the hands (and ears) of skilled technicians and musicians insures you that this amplifier is the absolute best it can be.

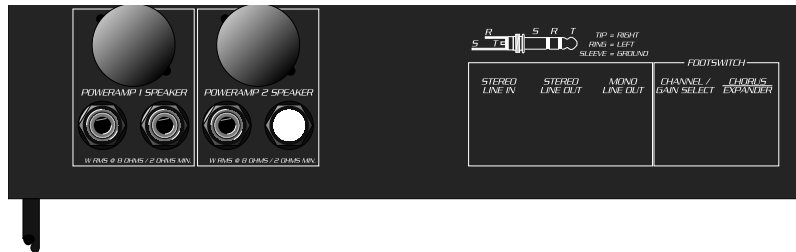
In order to get the most out of your new amplifier, we strongly urge you to go over the information contained in this manual before you begin playing.

And *thank you* for choosing **CRATE[®]**

CRATE[®] GX-140D Amplifier



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REAR PANEL:

24: AC LINE IN: This heavy-duty, grounded, three-wire power cord is to be plugged into ONLY a safely-wired, grounded 120 volt, 60 cycle AC power outlet. DO NOT attempt to defeat the ground connection of this cable! If your GX-140D was purchased outside of the United States, see the unit's rear panel for its power rating and follow the above guidelines.

25,26: POWER AMP 1, 2 SPEAKERS: You may connect the outputs of the GX-140D to your external speakers using these jacks. When connecting speakers use a matched pair; that is, two speakers with the same impedance to insure optimum performance from the amplifier. The amp 2 speaker jacks (#26) carry the chorus signal (when the chorus is on) while the amp 1 jacks (#25) are "dry" (without the chorus effect).

NOTE: The total impedance for each side should not be less than 4 ohms.

WARNING: DO NOT attempt to use headphones in the Speaker jacks! Permanent hearing damage could result!

IMPORTANT NOTE ABOUT CERTAIN EXPORT UNITS: In some areas 1/4" speaker jacks are not acceptable for use on amplifiers capable of high output power levels. For this reason the 1/4" speaker jacks on your amplifier may be sealed – in this case, use the Speakon[®] jacks provided.

27: STEREO LINE IN: When using a stereo effects device, connect its output here. This stereo 1/4" phone jack is wired as follows: Ring = amp 1, tip = amp 2, sleeve = ground.

28: STEREO LINE OUT: When using a stereo effects device, connect this jack to its input. This stereo 1/4" phone jack is wired as follows: Ring = output 1, tip = output 2, sleeve = ground.

If your effects device has stereo input and output jacks, use a pair of three-conductor stereo patch cords to connect to it. If the device has separate left and right jacks, use a pair of one-stereo-male to two-mono-female Y-adapters to make the connections, as shown to the right.

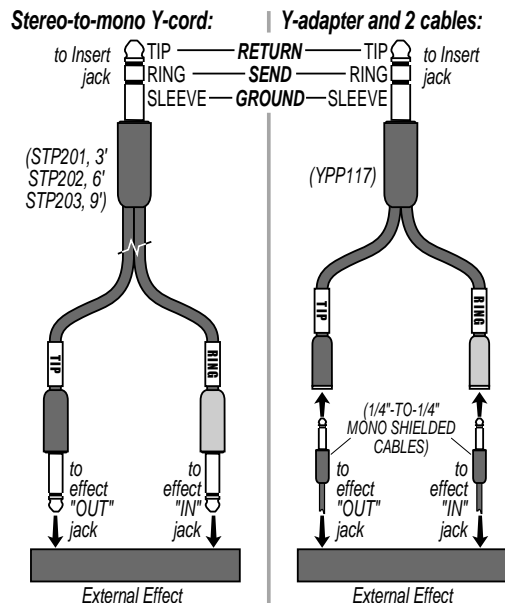
29: MONO LINE OUT: When using a mono effects device, connect this jack to its input.

30: CHANNEL/GAIN SELECT FOOTSWITCH: Plug a dual footswitch (such as the Crate CFP-2 or the "stereo" plug of the Crate CFP-3) here to control Channel Selection and the Gain Select button. The footswitch overrides the front panel switches (#5 and 9) and is wired as follows: Ring = Gain Select, tip = Channels, sleeve = ground.

31: CHORUS/EXPANDER FOOTSWITCH: Plug a single footswitch (such as the Crate CFP-1 or the "mono" plug of the Crate CFP-3) here to control the Chorus/Expander. The footswitch overrides the front panel on/off switch (#17); selection between the Chorus and the Expander is still controlled by the front panel selector switch (#18).

Connecting to the Insert jack:

The Insert jack (#16) lets you patch external effects into the amplifier just prior to its chorus/expander stage. Use Crate's STP201, STP202 or STP203 stereo-to-mono Y-cord or an adapter such as Crate's YPP117 and 2 1/4" mono signal cables to connect to the effect as shown below.



CRATE® GX-140D Amplifier

THE DSP SECTION:

You can program six different effects into your GX-140D: two for the Clean Channel and four for the Overdrive Channel. Follow these simple instructions to program the presets:

PROGRAMMING A PRESET:

1. Select the Clean Channel (the green led will be lit).
 2. Turn the Chorus/Expander OFF (button OUT).
 3. Turn the DSP Mode knob to the desired effect.
 4. You have just stored the effect for the Clean Channel with Chorus/Expander OFF. You can change the preset any time by returning to this same channel and Chorus selection and turning the Mode knob. The new effect will be stored at this setting until you change it again.
- Every time you select the Clean Channel with the Chorus/Expander “OFF” the amp recalls this effect. The “DSP Level” control sets the effect level.

PROGRAMMING THE OTHER PRESETS:

1. Select the Clean Channel (the green led will be lit).
 2. Turn the Chorus/Expander ON (button IN)
 3. Turn the DSP Mode knob to the desired effect.
 4. Repeat for the Overdrive Channel with the Shape and Chorus/Expander OFF, Shape and Chorus/Expander ON, Shape ON and Chorus/Expander OFF, Shape OFF and Chorus/Expander ON. You can change any of the presets any time by turning the Mode knob. The new effects will be stored at each amp setting until you change it again.
- Every time you select one of the amp’s modes (the Overdrive Channel, Shape and Chorus/Expander OFF, for example) the amp recalls the effect set for that mode. The “DSP Level” control sets the effect level.

THE DSP SETTINGS:			
#	Name	Type	Description
0	Off	None	Bypass—no signal processing occurs.
1	Sm Rm, Bright	Small Reverb	8' x 8' empty room with hardwood floors.
2	Sm Rm, Dark	Small Reverb	8' x 8' carpeted room with up to four people.
3	Sm Hall, Bright	Small Reverb	20' x 40' Rehearsal Hall, wood floors, hard walls.
4	Sm Hall, Dark	Small Reverb	20' x 40' carpeted Rehearsal Hall with draped walls and up to 30 people.
5	Lg Hall, Bright	Large Reverb	50' x 100' empty Rehearsal Hall, 20' ceilings.
6	Lg Hall, Dark	Large Reverb	50' x 100' Rehearsal Hall with up to 50 friends and crew.
7	Avg Club, Bright	Large Reverb	500 capacity empty club, wood floors, afternoon sound check.
8	Avg Club, Dark	Large Reverb	500 capacity club, wood floors, stuffed with people.
9	Cncrt Hall, Brt	Large Reverb	5,000-seat Concert hall, hard back wall, afternoon sound check.
10	Cncrt Hall, Dark	Large Reverb	5,000-seat Concert hall, sold out show.
11	Stadium	Large Reverb	40,000-seat round Stadium, afternoon sound check, 100 crew & VIPs only.
12	Gated rev, Med	Special Reverb	Studio Effect—Engineer cuts off reverb slightly after each note. (220ms Gate)
13	Gated rev, Long	Special Reverb	Studio Effect—Engineer lets note ring, then cuts it off. (350ms Gate)
14	Plate Reverb	Special Reverb	Studio Effect—Simulates Steel Plate Reverb.
15	Traditional Rev	Spec Rev.	Studio Effect—Simulates old-fashioned multi-spring tube reverb unit.
16	Slapback, Short	Delay	125ms delay + small reverb; Elvis' favorite.
17	Slapback, Med	Delay	350ms delay + small reverb; Rockabilly special.
18	Slapback, Long	Delay	557ms delay only, 630' travel time of sound.
19	Sh Md Surf Echo	Echo	85ms delay with 14.2% regen. & small reverb.
20	Sh Hd Surf Echo	Echo	85ms delay with 27.3% regeneration.
21	Sh/Med Md Surf	Echo	280ms delay with 21.8% regen & small reverb.
22	Md Sft Surf Echo	Echo	335ms delay with 12.5% regeneration.
23	Md Hd Surf Echo	Echo	335ms delay with 26.5% regen. & small reverb.
24	Md Glass Echo	Echo	335ms delay with 43.7% regeneration.
25	Lg Sft Surf Echo	Echo	485ms delay with 7.8% regeneration.
26	Lg Md Surf Echo	Echo	485ms delay with 20.3% regeneration.
27	Lg Hd Surf Echo	Echo	485ms delay with 39.2% regen & small reverb.
28	Infinite Delay	Special Eff.	506ms delay with over 90% regeneration.
29	Thickener	Special Eff.	33ms-based sound fattener @ selected freqs.
30	Multi-Tap	Special Eff.	Multi-thickener with some subtle delays added.
31	Reverse	Special Eff.	“Backwards masking” effect (number nine, number nine,...)

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SUGGESTED STARTING SETTINGS:

CLEAN:



BLUES:

RHYTHM:

LEAD:

SYSTEM BLOCK DIAGRAM:

The GX-140D is covered with a durable black Tolex material: wipe it clean with a lint-free cloth. Never spray cleaning agents onto the cabinet. Avoid abrasive cleansers which would damage the finish.





El GX-140D está cubierto con un material durable Tolex: límpielo con una toalla seca. Nunca rocíe el gabinete con sustancias limpiadoras. Evite usar materiales abrasivos con los cuales pueda danar el acabado.

Le GX-140D est couvert avec «Tolex» une matière noir et durable. Essuyer cette matière avec une toile propre et sans charpie. Ne pulvériser jamais les agents de nettoyage sur l'appareil. Éviter les nettoyeurs abrasifs qui peuvent s'endommager la «Tolex.»

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GX-140D TECHNICAL SPECIFICATIONS

Output Power Rating	70 watts RMS @ 5% THD 8 ohms load 120VAC 100 watts RMS @ 5% THD 4 ohms load 120VAC
Speaker Size and Rating	Crate Custom Design 12" with 1-3/4" voice coil Power Handling: 70 Watts RMS
Maximum Input Signal Level Accepted	8 volts, peak-to-peak
Total System Gain	Overdrive Channel: 108dB @ 1kHz Clean Channel: 56dB @ 1kHz
Input Impedance	470k ohms
Overdrive Channel:	Low Control: 10dB Range @ 80Hz Shape Control: Proprietary Circuit High Control: 10dB Range @ 7kHz
Clean Channel:	Low Control: 20dB Range @ 100Hz Mid Control: 14dB Range @ 700Hz High Control: 27dB Range @ 10kHz
Input Power Requirements	120 VAC, 60Hz, 230VA 100/115VAC, 50/60Hz, 230VA 230VAC, 50/60Hz, 230VA
Cabinet Size and Weight:	20" H x 26-1/2" W x 11" D, 58 lbs

 CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	<p>THIS EQUIPMENT HAS BEEN DESIGNED AND ENGINEERED TO PROVIDE SAFE AND RELIABLE OPERATION. IN ORDER TO PROLONG THE LIFE OF THE UNIT AND PREVENT ACCIDENTAL DAMAGES OR INJURY, PLEASE FOLLOW THESE PRECAUTIONARY GUIDELINES:</p> <p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT OPEN CHASSIS; DO NOT DEFEAT OR REMOVE THE GROUND PIN OF THE POWER CORD; CONNECT ONLY TO A PROPERLY GROUNDED AC POWER OUTLET.</p> <p>WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.</p> <p>CAUTION: NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p> <p>CAUTION: OUR AMPLIFIERS ARE CAPABLE OF PRODUCING HIGH SOUND PRESSURE LEVELS. CONTINUED EXPOSURE TO HIGH SOUND PRESSURE LEVELS CAN CAUSE PERMANENT HEARING IMPAIRMENT OR LOSS. USER CAUTION IS ADVISED AND EAR PROTECTION IS RECOMMENDED IF UNIT IS OPERATED AT HIGH VOLUME.</p>	<p>ESTE APARATO HA SIDO DISEÑADO Y CONSTRUÍDO PARA PROVEER AÑOS DE OPERACION SEGURA Y CONFIABLE. PARA PROLONGAR LA VIDA DE ESTA UNIDAD E IMPEDIR DANOS ACCIDENTALES POR FAVOR SIGA ESTAS INSTRUCCIONES PREVENTIVAS:</p> <p>PRECAUCION: PARA DISMINUIR EL RIESGO DE DESCARGAS ELECTRICAS: (1) NO ABRA LA CUBIERTA, (2) NO ES RECOMENDABLE REMOVER O DESACTIVAR LA PATA DEL POLO A TIERRA DEL CABLE DE CORRIENTE. CONECTE CORRECTAMENTE A UNA TOMA DE CORRIENTE A TIERRA.</p> <p>ADVERTENCIA: PARA EVITAR DESCARGAS EL ECTRICAS O PELIGRO DE INCENDIO, NO DEJE ESTE APARATO EXPUESTO A LA LLUVIA O HUMEDAD.</p> <p>PRECAUCION: NO HAY PIEZAS ADENTRO QUE EL USUARIO PUEDE REPARAR. DEJE TODO MANTENIMIENTO A LOS TÉCNICOS CALIFICADOS.</p> <p>PRECAUCION: NUESTROS AMPLIFICADORES PUEDEN PRODUCIR NIVELES DE PRESION DE SONIDO ALTO. EXPOSICION CONTINUADA A LOS NIVELES DE PRESION DE SONIDO ALTO PUEDE CAUSA DANO PERMANENTE A SU OIDO. ES ACONSEJADO QUE USE PRECAUCION AL USUARIO Y ES RECOMENDADO PROTECCION PARA LOS OIDOS SI LA UNIDAD ES OPERADA A VOLUMEN ALTO.</p>	<p>CET ÉQUIPEMENT AVAIT ÉTÉ INVENTÉ ET ARRANGE POUR POURVOIR DES ANNÉES D'USAGE SAUF ET SÛR. POUR PROLONGER LA VIE DE CET APPAREIL ET POUR EMPÊCHER LES DOMMAGES ET LES TORTS ACCIDENTELS, SUIVEZ LES INSTRUCTIONS DE PRÉCAUTION.</p> <p>AVERTISSEMENT: POUR RÉDUIRE LES RISQUES D'ÉLECTROCUTION: (1) N'OUVREZ PAS LE CHÂSSIS, (2) NE PAS ESSAYER DE SUPPRIMER LA BROCHE CORRESPONDANT À LA TERRE.</p> <p>ATTENTION: POUR RÉDUIRE LES RISQUES D'UN FEU OU D'ÉLECTROCUTION, N'EXPOSEZ PAS L'APPAREIL À LA PLUIE OU À LA MOÛTEUR.</p> <p>ATTENTION: IL N'Y A PAS D'ÉLÉMENTS RÉPARABLES DANS L'APPAREIL. CONSULTER UN TECHNICIEN QUALIFIÉ POUR LES RÉPARATIONS.</p> <p>ATTENTION: NOS AMPLIFICATEURS SONT CAPABLES DE LA PRODUCTION DES NIVEAUX DE SON D'UNE HAUTE PRESION. L'EXPOSITION CONTINUE AUX CES NIVEAUX PEUT CAUSER LA SURDITÉ PERMANENTE. LA PRUDENCE EST ADVISÉ À UTILISATEUR ET LA PROTECTION DES OREILLES EST RECOMMANDÉ SI L'APPAREIL EST UTILISÉ À UN HAUT NIVEAU DE VOLUME.</p>
 PRECAUCION RIESGO DE CORRIENTAZO NO ABRA			
 ATTENTION RISQUE D'ELECTROCUTION NE PAS OUVRI			
 VORSICHT ELEKTRISCHE SCHLÄGGEFAHR NICHT OFFENEN			
EXPLANATION OF GRAPHICAL SYMBOLS: EXPLICACION DE SIMBOLOS GRAFICOS: EXPLICATION DES SYMBOLES GRAPHIQUES:			

Crate continually develops new products, as well as improves existing ones. For this reason, the specifications and information in this Crate manual are subject to change without notice.

Crate continuamente desarrolla nuevos productos, así como también mejora los existentes. Por esta razón, las especificaciones e información incluidos en este manual están sujetos a cambios sin previo aviso

Crate développe continuellement des nouveaux produits, ainsi d'améliorer ceux qui existe. Pour cette raison les spécifications et les informations dans ce manuel peuvent se changer sans préavis.



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